

IV. SUMMARY OF RECOMMENDATIONS

In developing the recommendations contained in this report, the Council recognized that many require coordination with or action by agencies beyond the EPA. The Council has divided the *Opportunities for EPA* into the following categories:

- A. **Immediate:** Those that appear to be both technically feasible and within the scope of the EPA's mission, and could be implemented immediately through commitment of appropriate resources.
- B. **Mid-Term:** Those that appear to be technically feasible in the near future, but may lie outside the scope of the EPA's mission and/or require coordination with other agencies.
- C. **Long-Term:** Those that require substantial research and development and/or coordination with other agencies prior to implementation, but offer long-term rewards.

A. IMMEDIATE OPPORTUNITIES

World Population and Demographics

- Raise domestic awareness of the importance of sustainable development.
- Facilitate export of environmentally superior technologies through revitalization of the Environmental Trade Workgroup of the Trade Promotion Coordination Committee.

Natural Resources - Energy

- Expand the Energy-Star Program broadly across all consumer product sectors
- Establish a Green Vehicle Labeling Program to identify automobiles that are both energy efficient and manufactured using environmentally friendly components and processes.

Natural Resources - Water

- Integrate water efficiency with water quality standards and other regulations.
- Expedite the pending Pretreatment Streamlining Initiative in the Office of Water to address water quality / water efficiency conflicts in the effluent guidelines programs.

Natural Resources - Biodiversity, Land, and Food

- Enhance the use of Supplemental Environmental Projects in pending and future enforcement actions to encourage land conservation and restoration efforts.

Natural Resources - Air

- Follow-up the Office of Air and Radiation's report "Healthy Buildings, Healthy People" with a national voluntary partnership for a toxin-free indoor environment

Science and Technology

- Move beyond Project XL with new, simplified regulatory relief strategies to spur superior environmental performance and technological innovation.

- “Lead by Example” with a clear, Agency-wide commitment to environmental excellence, beginning with the EPA’s Strategic Plan.

Information Management and Access

- Expand the Agency’s information role through increased focus on delivering environmental education to the public.

Economics and Commerce

- Continue to identify cost-effective emerging environmental technologies through the Environmental Technology Verification program
- Support disaster preparedness by state and local governments, communities and U.S. industry through development and delivery of comprehensive vulnerability assessment tools and resources to implement effective contingency plans
- Expand the EPA’s product stewardship and Design for the Environment efforts to insure development of environmentally responsible products and services.

Politics and Social Evolution

- Enhance EPA’s own capacity to track State and local environmental performance to accurately assess the effectiveness of its major programs.
- Enhance the capacities of EPA’s Regional offices and States to effectively carry-out their delegated program responsibilities, including providing compliance assistance to regulated entities.
- Promptly reinstate Federal oversight capacity for distressed State programs where States fail to fulfill delegated program obligations or consistently fail to attain environmental objectives.
- Engage NGOs and other non-traditional stakeholders in identifying effective community-based approaches to environmental protection.

B. MID-TERM OPPORTUNITIES

World Population and Demographics

- Elevate the EPA’s international role in providing credible information on the environmental, economic and social impacts of population growth and consumption, and in supporting global sustainable development networks.

Natural Resources - Energy

- Encourage development of total cost accounting for energy technologies to facilitate responsible energy development.
- Spur investment in renewable energy resources and energy efficiency technologies through Clean Air Act State Implementation Plans.
- Promote market-oriented policies and programs for reducing greenhouse gas emissions
- Demonstration methane-to-hydrogen conversion and hydrogen energy technologies at publicly owned treatment works.

Natural Resources - Water

- Develop a holistic approach to water and the environment, working with EPA, other federal agencies, and non-government stakeholders.
- Redouble efforts to effectively include non-point sources in water management programs.

Natural Resources - Biodiversity, Land, and Food

- Continue to develop partnerships with State Departments of Natural Resources and other agencies for wildlife preservation and biodiversity protection.

Natural Resources - Air

- Develop a multi-pollutant approach to address air emissions from diffuse sources.

Science and Technology

- Marshall sound science in the development and defense of environmental standards.

Information Management and Access

- Expand the EPA's information coordination role with State and local regulatory partners and other entities performing environmental monitoring.
- Invest in and incorporate geospatial technologies into the Agency's rulemaking, regulatory and compliance procedures.

Economics and Commerce

- Implement a global alert system to identify high-environmental-risk manufacturing processes to minimize migration of these practices to economically vulnerable nations and communities.
- Integrate cumulative risk assessment into the EPA's and State permitting processes to foster environmental justice.

Politics and Social Evolution

- Support the Global Reporting Initiative pilot projects currently being tested at major multi-national corporations.

C. LONG-TERM OPPORTUNITIES

World Population and Demographics

- Establish an “Envirocorps” to complement the international aid efforts of the Peace Corps.

Natural Resources - Energy

- Support innovative research on sequestering carbon in energy production.
- Encourage research and development of hydrogen as a primary energy carrier.
- Partner with DoE on the new *Freedom Car* project that will develop hydrogen-fuel celled motor vehicles in the next ten years.

Natural Resources - Water

- Implement an effective market environment to minimize generation of hazardous waste through pollution prevention, source reduction, and other initiatives.

Natural Resources - Biodiversity, Land, and Food

- Develop comprehensive biodiversity indicators as primary indicators of ecological health.
- Expand domestic and global efforts to identify and control invasive species.
- Sponsor research and the benefits and costs of higher density community development.
- Assess the ecological and economic impacts of sea level rise resulting from global warming.
- Advocate environmentally advanced agriculture practices.
- Develop a national strategy to address the public health impacts of antibiotics, hormones, and other food additives in food production.

Natural Resources - Air

- Re-establish an advanced automotive technology partnership.
- Support research and development for advanced transit systems, including commercial vehicles.
- Support research on ultra-clean coal technology.

Science and Technology

- Create investment partnerships for energy efficiency.
- Identify and promote environmentally beneficial developments in biotechnology and nanotechnology.

Information Management and Access

- Monitor and promote the use of new sensing technologies in environmental monitoring.
- Perfect integrated monitoring technologies that allow “total human exposure” assessments to multi-media and multi-pollutant exposures.

Economics and Commerce

- Support the development of an international legal instrument to review and verify environmental performance.
- Assist in preventing ecological and economic development failures.
- Encourage conversion through informational outreach from a “goods” economy to one that provides the services that these goods provide.

Politics and Social Evolution

- Support U.S. participation in global environmental initiatives and conventions.

V. CONCLUSION

NACEPT developed this report in an effort to play a more active, strategic role in advising EPA. Through this process, the Council gained insight of the commitment, skills and resources involved in futures planning. While the Council, at times, struggled with questions of process, it has made great strides in understanding what works, and what does not work, in creating an environmental foresight radar. However, it is important to note that these are still first steps and much more can be done.

NACEPT looks forward to continuing this work with the Administrator and in partnering with the program offices that have worked so hard to initiate and lead strategic and futures planning. We hope that with this report, EPA will select specific emerging challenges and opportunities and return to NACEPT for further consultation. We look forward to EPA's response to this report and to future efforts to scan the environmental horizon.